

GEM/3 Release Note

Release 3.1

Digital Research Inc.

5153-1001-002

Copyright © 1988, 1989 Digital Research Inc. All rights reserved. Digital Research and GEM are registered trademarks of Digital Research Inc., and GEM 1st Word Plus, GEM Desktop, GEM Desktop Publisher, GEM Paint, and GEM Artline are trademarks of Digital Research Inc. Xerox is a registered trademark of Xerox Corporation. Ventura Publisher is a registered trademark of Ventura Software, Inc. PostScript is a registered trademark of Adobe Systems Inc. Hewlett-Packard and LaserJet are registered trademarks of Hewlett-Packard Corporation. Bitstream is a registered trademark and Fontware is a trademark of Bitstream, Inc.

GEM/3 Release Note

The information that follows was not available when the GEM®/3 Release 3.1 documentation went to press. The updated information includes:

- General information
- GEM Setup
- Hewlett-Packard® LaserJet® printers
- Dual-floppy disk computers
- GEM Output
- Ventura Publisher®

Note: The GEM/3 System Master Disk may include a README.DOC file that contains important information not in the documentation or this release note. You can display README.DOC on the screen by using the DOS TYPE command and print it by using the DOS PRINT command or the GEM Output program.

General Information

Printer Configuration Files

Printer configuration files for PostScript® and LaserJet printers (.CNF) now accompany the printer drivers and must be located in the \GEMAPPS\GEMSYS subdirectory (folder). If they are not in \GEMAPPS\GEMSYS, your output can be affected adversely—for example, the printer may produce incorrect margins or may not be able to find your printer fonts. The GEM Setup program normally handles this for you automatically.

Image Files and Screen Resolution

If you use an image file created on another system (for example, a GEM Paint illustration on an EGA monitor) in a GEM application, the image may appear slightly distorted, vertically or horizontally, when displayed on your system. The distortion is caused by a difference in screen resolution of the two systems. If the screen resolution of the two systems is different, the GEM application may display the image with one or more rows of pixels added or deleted. (*Pixels* are the rows/columns of dots that make up the screen image.)

The imported file is not affected unless you save it under the new screen resolution. The file is saved with the resolution of the system on which it is currently displayed. You can avoid undesirable resolution changes by working with image files under a single resolution such as EGA or VGA.

GEM Setup

During GEM Setup you can press <Esc> to cancel a selection. However, if you select a device to *remove* from your setup and then change your mind, you must quit and restart GEM Setup before selecting another device to remove. If you select another device without first quitting and restarting, both devices are removed.

Hewlett-Packard Laser Printers

The font information that follows pertains to the printers listed below:

- HP LaserJet
- LaserJet PLUS
- LaserJet II series
- 100% HP LaserJet compatible printers

GEM/3 Release 3.1 uses soft fonts and bit-mapped fonts for printing text on LaserJet printers. Soft fonts offer faster printing of text pages but have some restrictions (see below). Printer drivers for printing bit-mapped fonts are available in a device driver pack that can be purchased separately from Digital Research. (External font cartridges and built-in fonts are not used by GEM applications except GEM 1st Word Plus™.)

If you intend to use GEM/3 with applications other than GEM Artline™, GEM Paint™, and GEM 1st Word Plus, you can use the printer driver for the application or the GEM/3 driver.

If you use the GEM/3 soft font driver, you must use Fontware™ (included with GEM/3) to generate soft fonts before you can print text.

In addition, soft fonts:

- Cannot be obscured, partially or completely, by an object.
- Must be black-on-white (no white text on a black background).
- Must match exactly the required style and point sizes, for example, 12-point Dutch italic.
- Require a hard disk.
- Print in portrait or landscape orientation, but cannot both be printed on the same page. (The bit-map printer drivers can print both portrait and landscape fonts on the same page.)

Please refer to the *Fontware Installation Guide* for more information.

Dual-Floppy Disk Computers

Note: The following information does not apply to hard-disk computers.

GEM/3 can be installed and run on a system that consists of two floppy disk drives. GEM Setup detects that your system does not include a hard disk and prompts you to create a set of floppy disks from the GEM/3 masters. However, the GEM Desktop floppy disk that is created may not

have sufficient space to hold all the necessary files, depending on the printer you select.

While you are running GEM Setup, a message is displayed that GEM Setup cannot copy one or more files to the GEM Desktop disk. Since the files are invariably printer font files, you lose the ability to print those fonts. You can include the fonts by taking the following steps:

1. When GEM Setup reports that it cannot copy one or more files, make a note of the last three characters in the file names that are listed. For example, for AI360GBP.EPS you need to note the letters EPS. Note also the name and number of the disk in Drive A.
2. After GEM Setup is finished, use the DISKCOPY command to make a copy of the GEM Desktop disk that you created. For example:

DISKCOPY A: B:

copies all the files on the floppy disk in Drive A to the floppy disk in Drive B. (See your DOS documentation for details of the DISKCOPY command if you are unfamiliar with it.)

Label the copy "GEM Print Disk."

3. Delete files that are on the Desktop disk from the GEM Print Disk. Insert the GEM Print Disk in Drive B and enter the following command:

DEL B:\GEMAPPS\GEMSYS\DESK*.*

All files whose name begins with DESK are deleted from the GEM Print Disk.

4. Now you can add the missing font files to the GEM Print Disk. Insert the disk whose name and number you noted in Step 1 (for example, GEM/3 Printer Disk #2) into Drive A (leave the GEM Print Disk in Drive B). Enter the appropriate COPY command. For example, if the missing files have the extension .EPS the correct command is:

COPY A:*.EPS B:\GEMAPPS\FONTS

Printing from Your GEM Print Disk

Printing from GEM/3 is done by accessing Output from GEM Desktop™. You can start Output from GEM Desktop as described in the *GEM Desktop User's Guide*. Although Output can also be started directly from many applications on hard disk systems, on a dual-floppy system, you must start Output from GEM Desktop.

1. Before starting, remove the GEM Desktop disk from Drive A and replace it with the GEM Print Disk.
2. Use Output to print your document.

When you quit Output, you are prompted to remove the GEM Print Disk from Drive A and replace it with the GEM Desktop disk.

GEM Output

The following changes have been made in the GEM Output program:


- Fill pattern rotation
- Paper Size dialog (PRINTER PREFERENCES)
- Page dialog (PRINTER PREFERENCES)

Fill Pattern Rotation

GEM Output now automatically rotates fill patterns to print accurately in landscape orientation.

Paper Size Dialog


The "Paper size" dialog (Paper Size command in the Preferences menu for printers and plotters) now allows you to specify a custom paper size for output.



HP Laser 300

PRINTER PREFERENCES: Paper size

Units: ☒ Inches ☐ Centimeters

<input checked="" type="radio"/> Letter (8.50x11.00)	<input type="radio"/> Legal (8.50x14.00)
<input type="radio"/> Half (8.50x 5.50)	<input type="radio"/> Ledger (11.00x17.00)
<input type="radio"/> Broad (18.00x24.00)	<input type="radio"/> Wide (14.00x11.00)
<input type="radio"/> A4 (8.27x11.69)	<input type="radio"/> B5 (7.17x 9.84)
<input checked="" type="radio"/> Custom (8.50 x11.00)	


WIDTH


HEIGHT

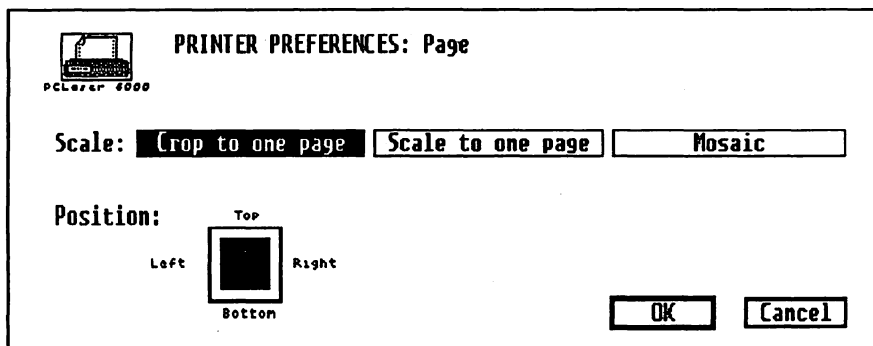
OK Cancel

To set a custom paper size, click on the Custom button and then set the page width and height with the slider bars under the button. The minimum width/height setting is 2 inches; the maximum is 25 inches (5 to 65 centimeters). You can change values by:

- Moving the slider—point to the slider box and, holding the mouse button down, move the pointer left (decrease) or right (increase). Clicking on the bar increases or decreases the value by half an inch (or 0.5 centimeters, if that is the selected unit of measure).
- Clicking on the left or right arrow of the appropriate slider increases or decreases the value by 0.01 inch or 0.01 centimeter.

The "Paper size" dialog is discussed in detail in the *GEM/3 Desktop User's Guide*.

Page Preferences Dialog



The Page dialog (Page command in the Preferences menu for printers and plotters) no longer allows you to insert final form feed.

In addition, the dialog has replaced the "True size" and "Make fit" scaling options with three options:

Crop to one page

Maintains the image and/or text in actual size and centered on a single page. Any portion that does not fit on the page is cropped (not printed—the image/text remains unchanged in the file).

Scale to one page

Enlarges or reduces the image/text to fit on one full page—equivalent to the former "Make fit" choice. The "Position" indicator at the left bottom of the dialog is used with this option.

Mosaic

Maintains the image/text in actual size and prints as many pages as necessary to complete the total image/text. You can use this option to print oversize pages in segments on several sheets and then attach the segments to form the whole.

Ventura Publisher

The following information pertains to:

- Ventura 1.1 conversion
- Screen driver compatibility
- Font compatibility

Ventura 1.1 Conversion

GEM 3.1 supports applications, such as GEM Artline, that produce illustrations containing Bézier curves. Release 2.0 of Ventura can display and print the curves but Release 1.1 cannot. In a default Ventura 1.1 installation, Bézier curves in GEM Artline illustrations appear as straight line segments instead of smooth curves.

To upgrade your Ventura 1.1 system to accept Bézier curves, run the VCONV.EXE program located on Printer Disk #1. VCONV can be run from the floppy disk or you can copy it to your hard disk. To run the conversion, enter VCONV on the DOS command line of the root directory.

Note: You cannot use Ventura 2.0 drivers with Release 1.1 to obtain Bézier curves—you must upgrade Ventura 1.1 with the VCONV program.

When you run VCONV.EXE, the following steps are taken:

- The Ventura printer drivers are renamed—PD_ *drivername* to XX_ *drivername*. If the PostScript auxiliary file PS2.PRE is present, it is renamed to PS2.XXX.
- The GEM screen and printer drivers are copied, as well as GEMVDI, to the \VENTURA directory. GEM files PS2.PRE and PRTRERR.STR are copied from \GEMAPPS\GEMSYS to \VENTURA.
- If there is a POSTSCRT.CNF file in \VENTURA, a copy is made and renamed as PST.CNF. If there is an HPLJPLUS.CNF, two copies are made and renamed HPH.CNF and HPU.CNF.

To run the upgraded version of Ventura, enter VPX on the command line. Ventura can then process Bézier curves correctly. If you enter VP, you can still run Ventura but Bézier curves are not rendered correctly.

Restoring Ventura 1.1

To restore your Ventura 1.1 system to its original state:

1. Delete the newly created GEM printer driver files PD_*drivername*.
2. Rename the XX_*drivername* printer drivers back to PD_*drivername*.
3. Rename PS2.XXX to its original name, PS2.PRE.
4. The newly created files HPH.CNF, HPU.CNF, PST.CNF, GEMVDI.EXE, and the GEM screen drivers SD???9.??? may be deleted if desired.

Screen Driver Compatibility

Ventura 2.0 and 1.1 screen drivers have two limitations on their compatibility:

- Using Release 2.0 drivers with Release 1.1 does not give you Bézier capability.
- The VCONV conversion applies only to GEM 3.1 drivers installed by GEM Setup. It may not work on third-party Ventura 1.1 drivers.

Creating Soft Fonts for Ventura Publisher

You can use the version of Fontware that is included with your GEM application to create soft fonts for use with Ventura Publisher. If you do, however, be aware of the following:

- If you merge OUTPUT.WID with a width table created by Fontware, you may see an alert telling you that you are merging width tables for different devices. (The Ventura driver calls the printer "HP LJ+, 300

dpi" and the GEM/3 driver calls it "HP LaserJet+, 300 dpi." They are both the HP LaserJet PLUS.)

As long as the fonts you have made are truly for the LaserJet PLUS, you can click on the alert's Ignore button and allow Ventura to complete the merge.

- If you merge the Swiss and Dutch fonts created by the default Ventura installation with fonts created with GEM Fontware, you will encounter the following differences in character positions:

	GEM	Ventura
<Alt>-155	ø	¢
<Alt>-157	Ø	¥
<Alt>-178	¥	Ø
<Alt>-179	¢	ø

For example, if you insert <Alt>-155 into your document, ø appears on your display and ¢ on your printed output. If you use GEM Fontware fonts, ø appears both on the screen and in printed output.

Note: To enter ASCII characters, hold down <Alt> and enter the decimal equivalent with the numeric keypad. (The number keys at the top of the keyboard do not work for entering ASCII characters with the <Alt> key.)

You can order the Release 3.1 device drivers listed here from Digital Research®. To select a driver pack, circle the driver pack number on the reverse side, indicate quantity and media size, and complete the form. If your device is not listed here, call (800) 443-4200—new drivers are continually being added.

Note: Drivers for previous releases of GEM (2.2, 3.0) should not be used with GEM Release 3.1.

Driver Pack	Contents
1	Plotter Drivers HPGL; DM/PL
2	ATT DEB Color Card (640 x 400)
3	Quad EGA Prosync (752 x 410)
4	IBM EGA Mono on Enhanced Display (640 x 350)
5	IBM EGA 16 Color on Color Display (640 x 200)
6	Amstrad PC1512 16 Color
7	Xerox 4020 Color (120 dpi)
8	HP LaserJet II, Bitmap Only, (300 dpi)
9	HP LaserJet Plus, Bitmap Only, (150 dpi)
10	Epson GQ 3500 (300 dpi)
11	Tall Tree J Laser Printer Card (300 dpi)
12	Xerox 4045 (300 dpi)
13	AST TurboLaser Printer (300 dpi)
14	HP DeskJet (300 dpi)
15	Ricoh PC Laser 6000 (300 dpi)
16	IBM Quietwriter II and III (240 dpi)
17	IBM Quickwriter (180 dpi)
18	IBM Proprinter X24 and XL24 (180 dpi)
19	Epson LQ 2500C Color (180 dpi)
20	Epson JX 80 Color (120 x 144 dpi)
21	Toshiba P351C Color (180 dpi)
22	Quadram QuadJet Color (84 dpi)
23	HP ThinkJet (96 dpi)
24	IBM Color JetPrinter (100 x 96 dpi)
25	NOT ASSIGNED
26	EGA—Genoa (800 x 600)
27	CalComp PlotMaster/ColorMaster

GEM®/3

Driver Pack Order Form

Pack Number	Qty	Media 3.5"	Media 5.25"	Pack Number	Qty	Media 3.5"	Media 5.25"
1	_____	<input type="checkbox"/>	<input type="checkbox"/>	14	_____	<input type="checkbox"/>	<input type="checkbox"/>
2	_____	<input type="checkbox"/>	<input type="checkbox"/>	15	_____	<input type="checkbox"/>	<input type="checkbox"/>
3	_____	<input type="checkbox"/>	<input type="checkbox"/>	16	_____	<input type="checkbox"/>	<input type="checkbox"/>
4	_____	<input type="checkbox"/>	<input type="checkbox"/>	17	_____	<input type="checkbox"/>	<input type="checkbox"/>
5	_____	<input type="checkbox"/>	<input type="checkbox"/>	18	_____	<input type="checkbox"/>	<input type="checkbox"/>
6	_____	<input type="checkbox"/>	<input type="checkbox"/>	19	_____	<input type="checkbox"/>	<input type="checkbox"/>
7	_____	<input type="checkbox"/>	<input type="checkbox"/>	20	_____	<input type="checkbox"/>	<input type="checkbox"/>
8	_____	<input type="checkbox"/>	<input type="checkbox"/>	21	_____	<input type="checkbox"/>	<input type="checkbox"/>
9	_____	<input type="checkbox"/>	<input type="checkbox"/>	22	_____	<input type="checkbox"/>	<input type="checkbox"/>
10	_____	<input type="checkbox"/>	<input type="checkbox"/>	23	_____	<input type="checkbox"/>	<input type="checkbox"/>
11	_____	<input type="checkbox"/>	<input type="checkbox"/>	24	_____	<input type="checkbox"/>	<input type="checkbox"/>
12	_____	<input type="checkbox"/>	<input type="checkbox"/>	26	_____	<input type="checkbox"/>	<input type="checkbox"/>
13	_____	<input type="checkbox"/>	<input type="checkbox"/>	27	_____	<input type="checkbox"/>	<input type="checkbox"/>

Ship To: _____ Phone _____

Company _____

Shipping Address _____

City _____ State _____ Zip _____

Method of Shipment: UPS ONLY. Allow four to six weeks for delivery. Please supply a street address; UPS does not deliver to PO Boxes.

Method of Payment:

☐ Credit Card: VISA MC AM-EX (Circle One) Expires: _____

Card # _____

Name of Cardholder _____

Signature _____

☐ Check Check # _____

(No purchase orders or C.O.D.s accepted. Payment must accompany this form. Make checks payable to Digital Research Inc. International orders must be in U.S. currency and drawn on a U.S. bank.)

Number of Driver Packs @ \$10.00 ea. = \$ _____

Sales tax (California 6%, Illinois 8%,
Maryland 5%, New York 8.25%,
Texas 7.5%, Vermont 4%,
Washington D.C. 6%) = \$ _____

Shipping and handling
(\$5 US, \$15 Canada, \$20 all others) = \$ _____

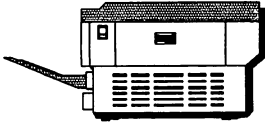
TOTAL = \$ _____

MAIL TO: Digital Research Inc.
Order Processing Dept.
P.O. Box DRI
Monterey, CA 93942

Important Note

For Hewlett-Packard® Laser Printer Users

If you intend to use this release of GEM®/3 with applications other than GEM® Artline™, GEM® Paint™, and GEM® 1st Word Plus™, you must use the Bitstream® Fontware™ installation kit supplied with this package to generate softfonts for the following printers:



- HP LaserJet™
- LaserJet Plus™
- LaserJet II™ series
- 100% HP LaserJet compatible

This procedure is necessary in order to print text from your GEM applications.

Please refer to the *GEM 3.1 Release Note* and *Fontware Installation Guide* for more information.

